Applicant respectfully traverses the 35 U.S.C. § 102(e) rejection to claims 1-25 at least because *Richardson* relates to space profiling, while methods and systems in accordance with the pending claims pertain to time profiling. For example, claims 1 and 8 recite, among other things, "[a] method for <u>time</u> profiling." (Emphasis added).

Richardson profiles memory <u>space</u>, *i.e.,* memory addresses, not different times. *Richardson* discloses a "memory access profiling tool" which tracks which "virtual memory address are accessed by each thread." (*Richardson*, Abstract). "Virtual memory access thread profiling tool 100 outputs a thread placement file 130 that lists virtual address regions accessed by respective threads." (Col. 5, ll. 46-47). "[V]irtual memory access thread profiling tool 100 analyzes which regions of virtual memory are accessed by each program thread 105." (Col. 5, ll. 52-54).

There is a fundamental difference between space profiling and time profiling. *Richardson* profiles the location of memory accesses which involves the profiling of memory space at a specific time. Methods and systems in accordance with the present invention profile timing, which involves profiling threads from one point in time to another. Conversely, *Richardson* does not profile and compare different times.

In general, space profiling, as disclosed in *Richardson*, compares differing memory space accesses in a single sampling point or during a single interrupt. "When an interrupt is issued . . . . A virtual memory address . . . is then read." (Col. 4, ll. 46-47 and 55-56; see also col. 6., l. 17.) Generally, time profiling compares different sampling (interrupt) points to each other.

In contrast, claim 1 recites, *inter alia*, "determining whether register data corresponding to a selected thread has changed." To determine whether it has changed entails knowing what it was at a previous time, *i.e.*, interrupt or sampling point, and comparing it to the previous time. *Richardson* compares use of different memory spaces at one specific time (or interrupt) and thus does not determine whether register data corresponding to a selected thread has changed. Thus, claims 1-4 are patentable over the cited reference, and claims 9-12, 17-20 and 25 are similarly patentable because they contain the same recitation.

Remaining pending claims 5-8, 13-16 and 21-24 contain a similar recitation and are also patentable for at least these reasons. For example, claims 5-7, 13-15, and 21-23 recite, among other things, "computing a value based on the register data" and "comparing the computed value with register information stored following a previous suspension of the multi-threaded program." *Richardson* does not compare to a previous suspension or interrupt, in part because it does not time profile. It compares space usage during a single interrupt.

Claim 8 recites, *inter alia*, "recording time-profiling information for each running thread" (emphasis added) and, as stated, *Richardson* does not perform time profiling. As such, claim 8 as well as claims 16 and 24, are also patentable over the cited reference.

Applicant's representative has requested a telephone interview several times, but has not received a response. During a phone call to schedule an interview with the Examiner, Examiner indicated that he would schedule an interview if he received an interview agenda, which was subsequently sent on May 18, 2001. Applicant's

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representative made follow up calls with the Examiner who indicated that he would call back to schedule the interview, but no call was received. Applicant's representative continues to invite the Examiner to arrange for an interview in this case.

Applicant respectfully requests that this Amendment under 37 C.F.R. § 1.116 be entered by the Examiner, allowing for immediate action by the Examiner. Applicant respectfully requests reconsideration and withdrawal of the pending rejections.

Furthermore, Applicant respectfully points out that the final action by the Examiner presented some new arguments as to the application of the art against Applicant's invention. It is respectfully submitted that the entering of the Amendment would allow the Applicant to reply to the final rejections and place the application in condition for allowance.

Finally, Applicant submits that the entry of the amendment would place the application in better form for appeal, should the Examiner dispute the patentability of the pending claims 1-25.

In view of the foregoing remarks, Applicant submits that this claimed invention, neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicant therefore requests the entry of this Amendment, the Examiner's reconsideration and reexamination of the application, and the timely allowance of pending claims 1-25.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated:￼￼August 31, 2001￼￼By:￼

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